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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,394	02/02/2001	Vincent Bryan	46739/252388	1424

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EXAMINER

STEWART, ALVIN J

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 12/17/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,394

Applicant(s)

Bryan et al

Examiner

Alvin Stewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 11, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4 and 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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DETAILED ACTION

Reissue Applications

This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Michelson US Patent 5,015,247.

Kuslich discloses a method of spinal surgery comprising forming mounting holes (see spikes in Fig. 1) in one or more vertebrae bodies of a patient's spine, utilizing the mounting holes to mount

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a bone mill (see Fig. 3A) on a patient's spine, milling confronting bone surfaces on and in the patient's spine, removing the mill; and mounting an intervertebral disc having a convex surface that mate the concave outer surface of the bone.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson US Patent 5,015,247 in view of Shepperd US Patent 4,863,476.

Michelson discloses the invention substantially as claimed. However, Michelson does not disclose an intervertebral disc comprising a resilient disc body and concave-convex elements at least partly surrounding the resilient disc body in the patient's spine.

Shepperd teaches a spinal implant having a convex outer-shape and a resilient disc body between the two surfaces (see Figs. 1-5 and col. 3, lines 45-47).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to change the rigid cylindrical spinal implant of the Michelson reference with the flexible spinal implant of the Shepperd reference in order to facilitate the attachment of the implant into the bone.

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Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelson US Patent 5,015,247 in view of Shepperd US Patent 4,863,476 as applied to claim 4 above, and further in view of Fuhrmann et al US Patent 5,002,576.

Michelson as modify by Shepperd discloses the invention substantially as claimed. However, Michelson as modify by Shepperd does not disclose a fluid-tight seal member surrounding the resilient member and a groove encircling the periphery of each support and a retaining band.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a flexible polymer sheet as discloses by the Fuhrmann et al reference in order to cover the resilient body of the Shepperd reference. It would have been obvious to one having ordinary skill in the art to add the polymer sheet around the resilient body in order to preserve the disc.

Allowable Subject Matter

Claims 1-3 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Alvin Stewart whose telephone number is (703) 305-0277. The examiner can normally be reached on Monday-Friday from 7:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on (703)308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Alvin Stewart

December 10, 2001.



**CORRINE McDERMOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700**